

Presentation on

NVVN Journey Challenges / Cross – Border Trading

5th November 2018
Kathmandu, Nepal



NTPC VUDYUT VYAPAR NIGAM LIMITED

NVVN – A wholly owned subsidiary of NTPC

Only PSU in Power Trading

Incorporated on

1st Nov. 2002

Commencement of Business

26th Nov. 2002

Paid up Share Capital

Rs.20 Crores

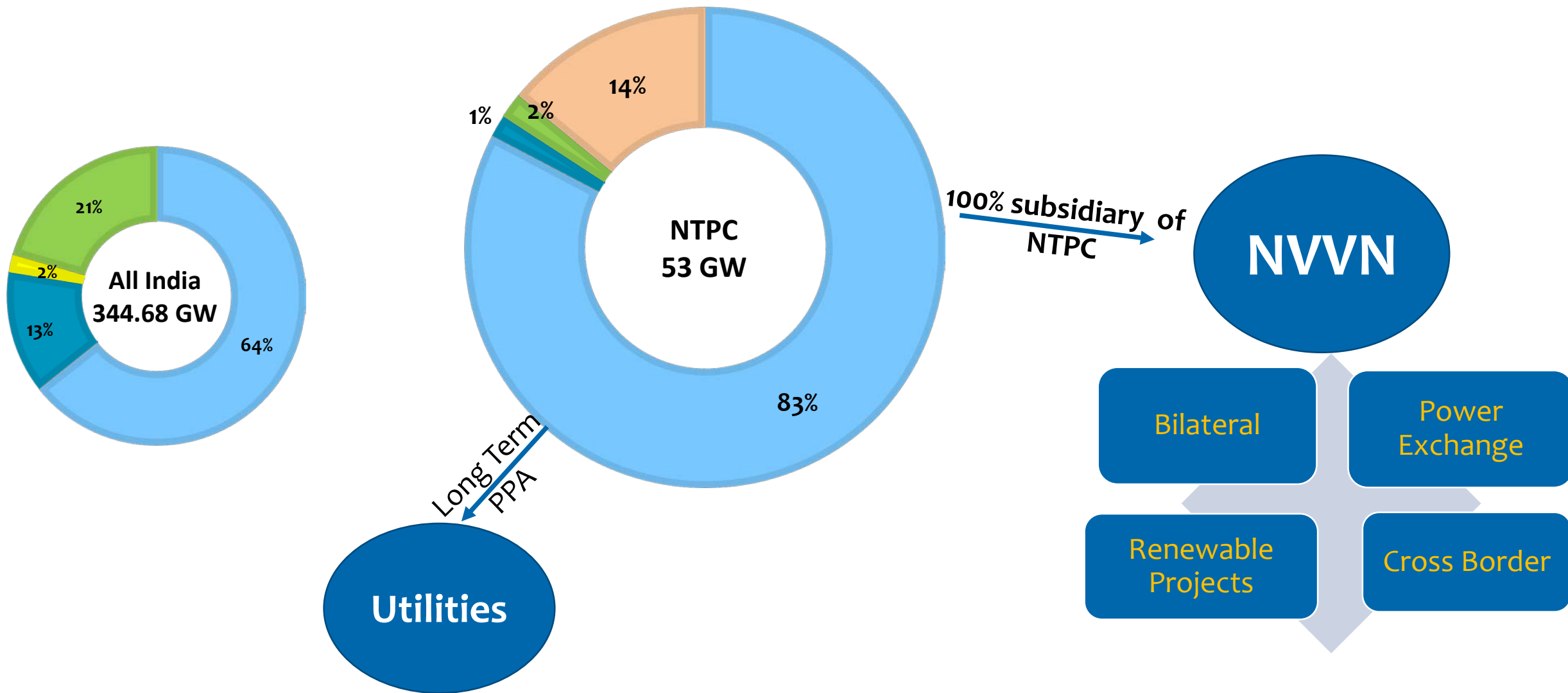
Trading License

Category - I

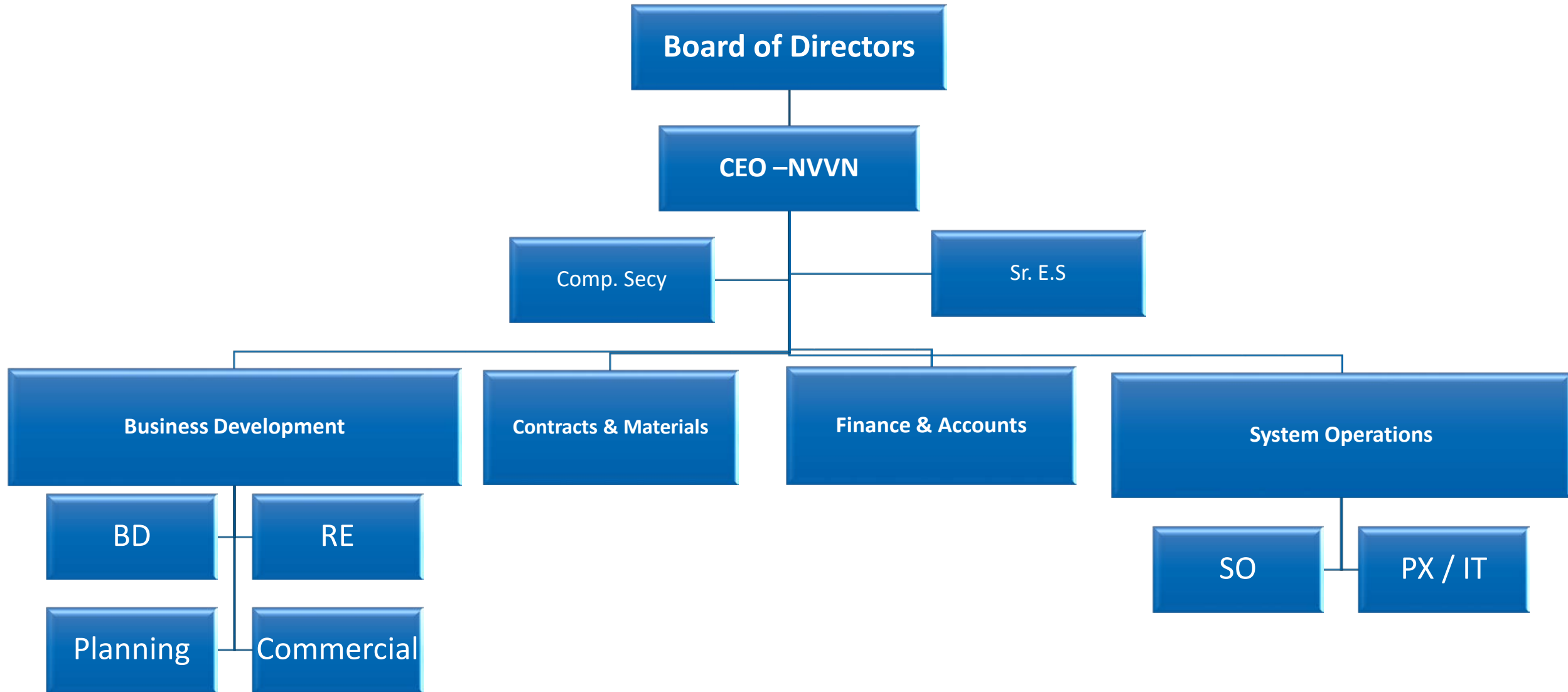
Consistently Achieved Excellent MOU Rating Since Beginning

Installed Capacity

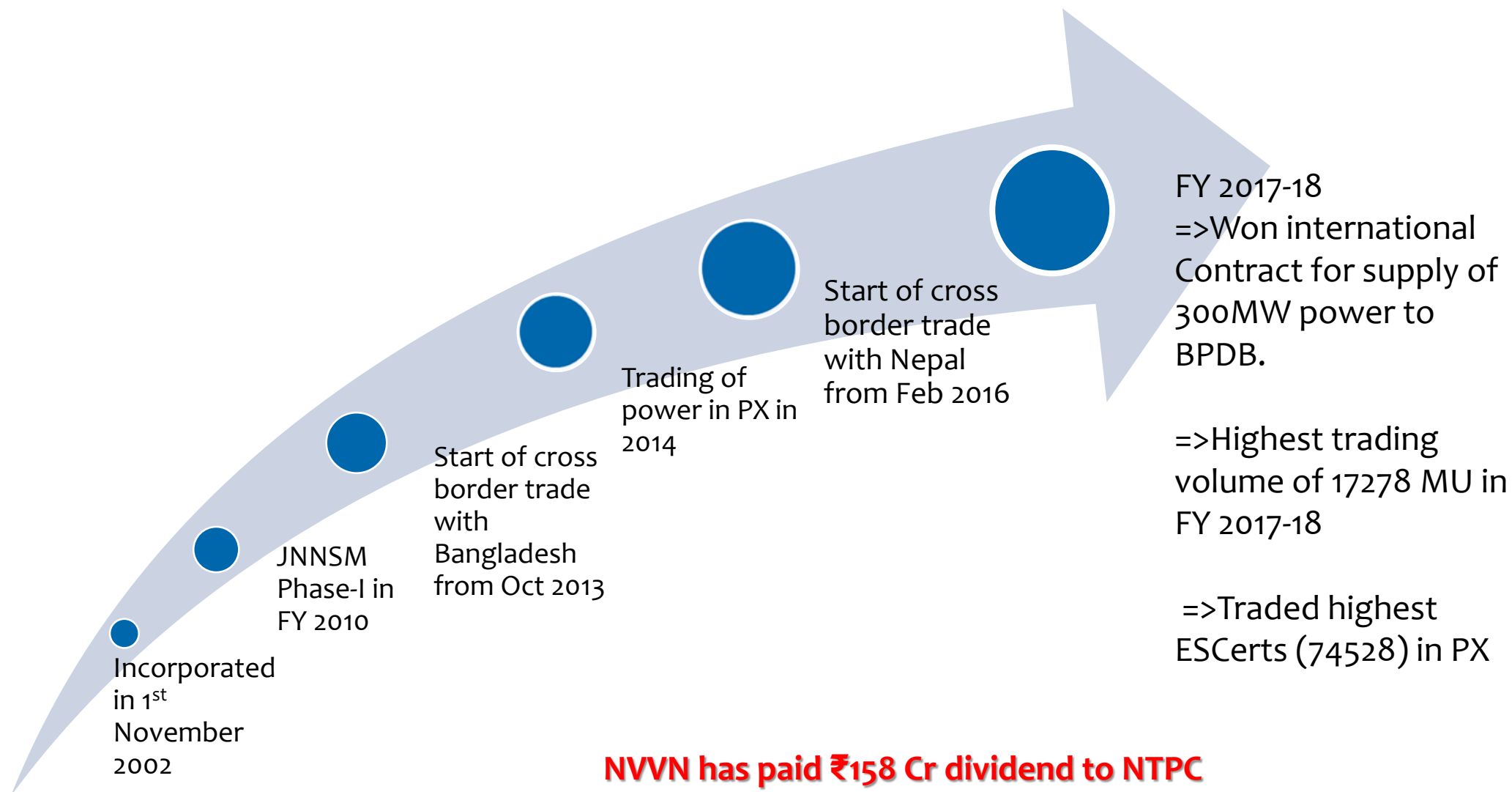
■ Nuclear ■ Coal & Gas/ Liquid fuel ■ Hydro ■ Renewable Energy projects ■ Subsidiaries/ JVs



NVVN Organization Chart



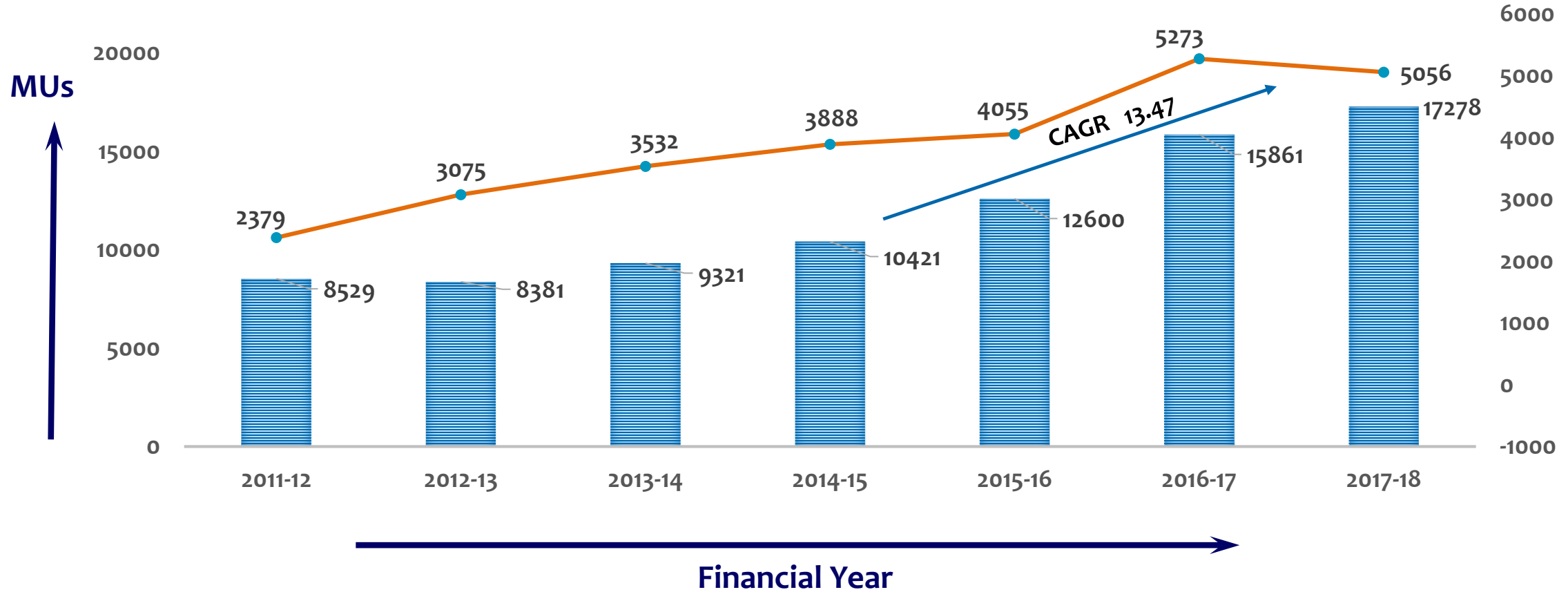
NVVN Journey of Excellence



NVVN's Performance

PERFORMANCE OF NVVN

Volume Traded by NVVN (MU) Turnover (Rs Cr)



Challenges

- Working Capital
- NOC from Discom / Generator

Trading
in PX

National
Solar
Mission

- Reverse Auction
- Tariff for Solar
- Transmission Access

Cross
Border

Bilateral/
Swap

- Limited Transmission Link
- Payment Security

- Poor financial health of DISCOM

Trading in PX

- ✓ NVVN took time to understand the market
- ✓ “Sale” in PX is cool
- ✓ “Buy” is hot , need working capital

Learning was quickly enter into new market

Characteristic of Power Trading company

- ✓ Small and flexible Company
- ✓ Fast Decision Making
- ✓ Structured Delegation Of Power
- ✓ Technology (S/W) Driven
- ✓ Availability of Funds (Working capital)
- ✓ Strong Technical / Financial back office staff
- ✓ Round the Clock Control Room

CROSS-BORDER SUPPLY OF POWER & KEY CHALLENGES

Supply of Power to Neighbouring Countries.

Sl.No	Country From	Country To	Quantum (MW)
1	India	Bangladesh	1160
2	India	Nepal	400
3	India	Myanmar	03
4	Bhutan	India	1542

Existing Cross-Border Power Trading

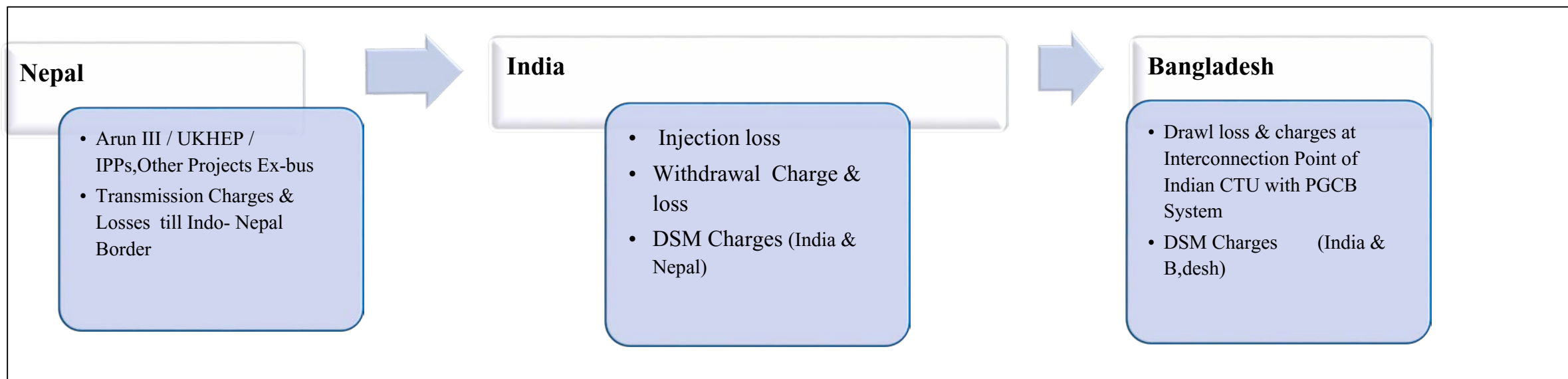
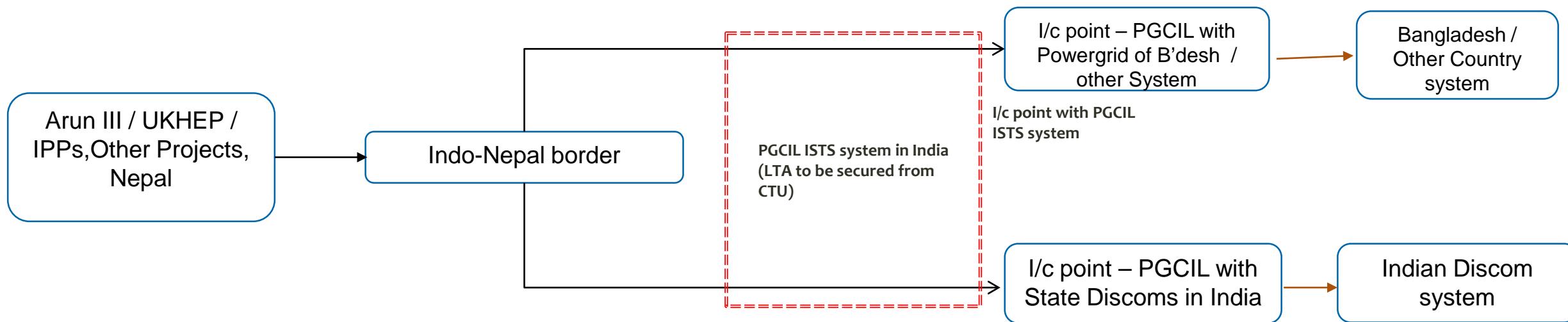
Country	Contract quantum	Type
India -> Bangladesh (1160 MW)	BPDB Long-term contract with NVVNL for 250 MW from NTPC	G to G
	BPDB Long-term contract with NVVNL for 300 MW from DVC	Commercial
	BPDB Long-term contract with Sembcorp for 250 MW	Commercial
	BPDB Short-term contract for 200 MW with WBSEDCL + long term with Meenakshi Power through PTC.	Commercial
	Tripura – Comilla 160 MW under Radial Mode through NVVN	G to G
India -> Nepal (400 MW)	BSPHCL (Bihar to Nepal) 200MW	G to G
	160 MW power from NVVNL to Nepal	Commercial
	20-30 MW power from Open Market to Nepal during Dec to April month	Commercial
Bhutan -> India (1542MW)	Contract with Chukka (336 MW), Kurichhu (60 MW) Hydro Projects (Long Term)	G to G
	Contract with Tala (1040 MW) Hydro Project (Long Term)	G to G
	Contract with Dagachhu (126 MW) Hydro Project (Long Term)	Commercial
India-> Myanmar (3MW)	Contract with Myanmar (3 MW) Power flow from Manipur	G-G



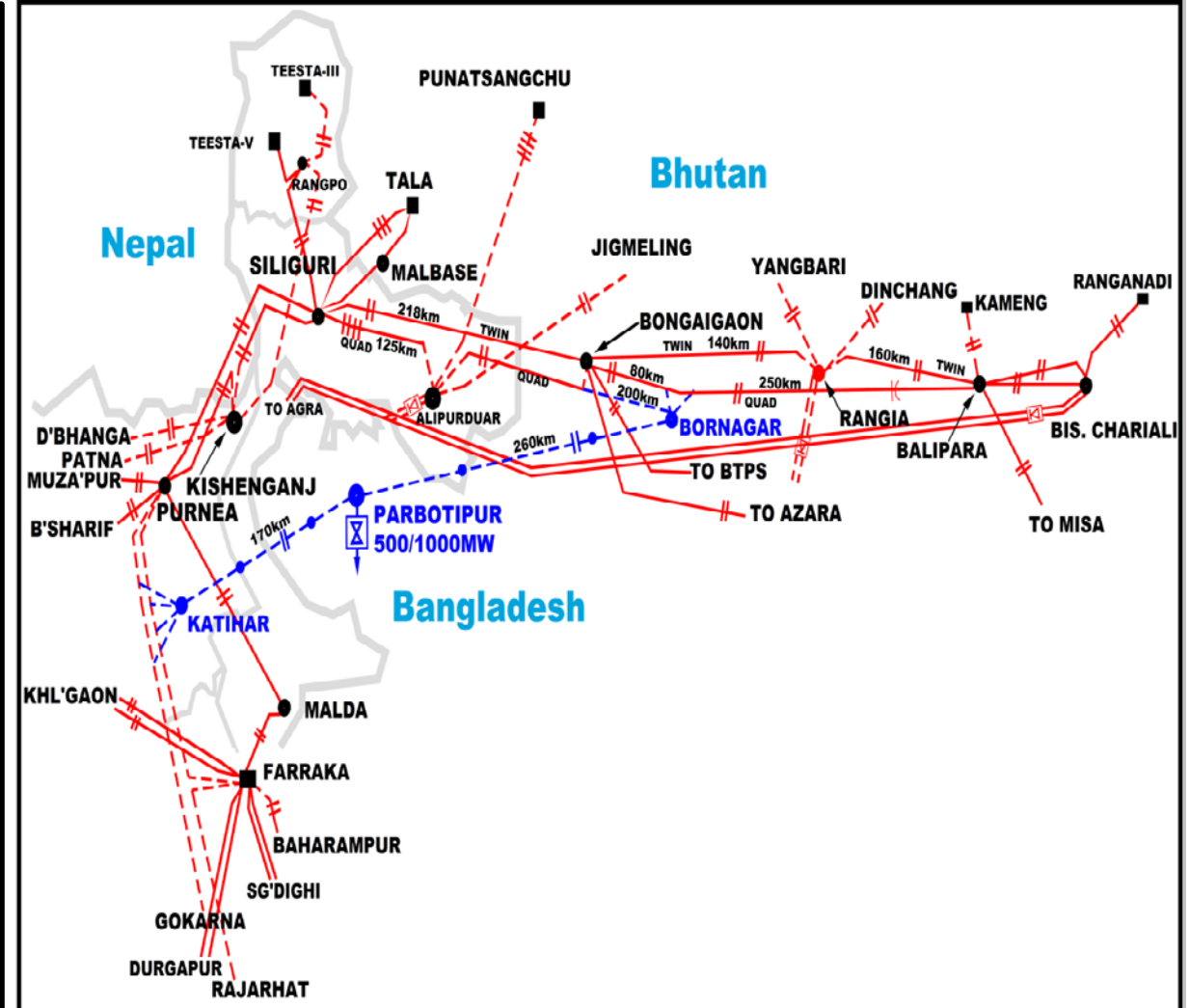
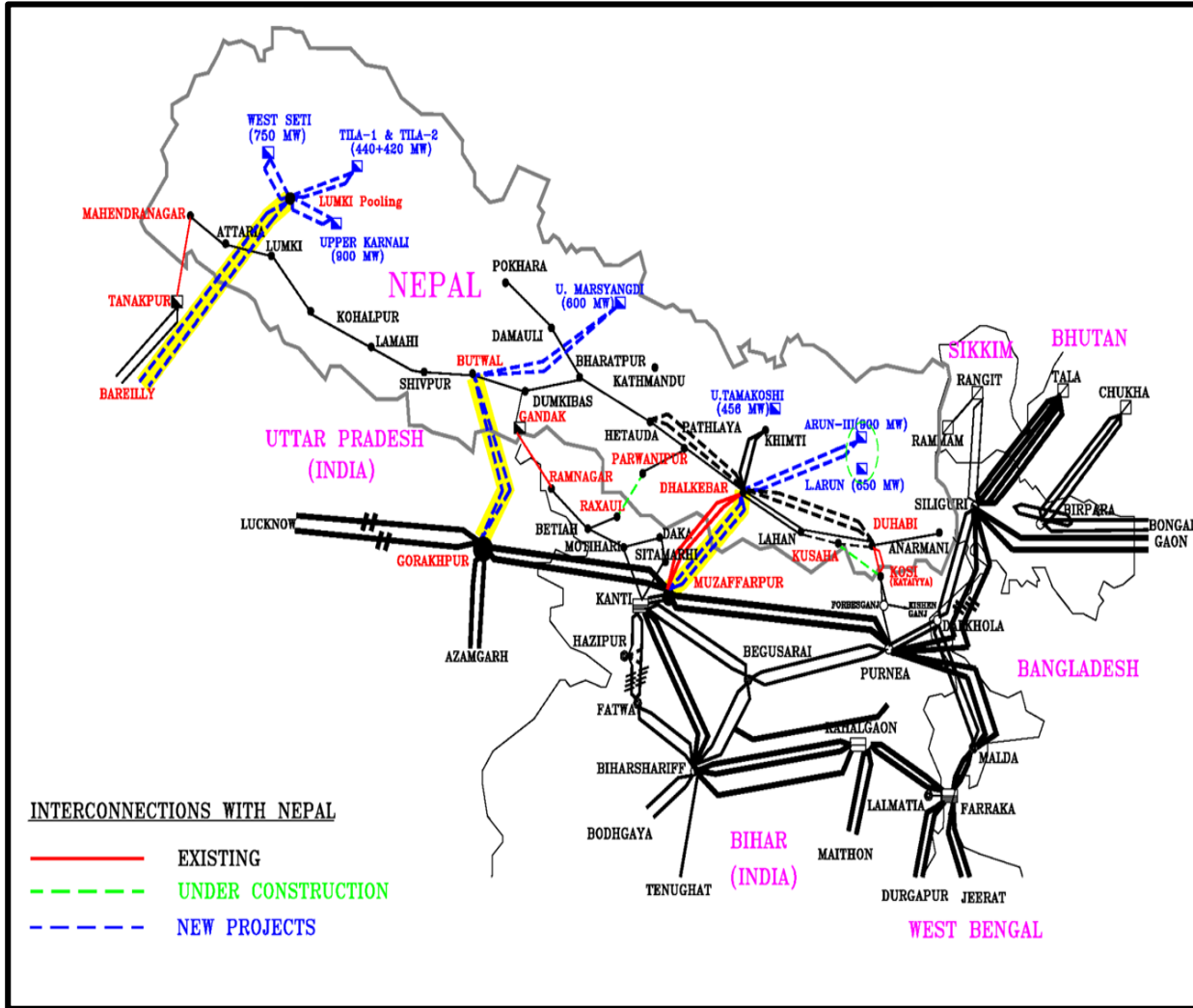
Challenges of Cross – Border Trade

- ✓ Inter-Country Transmission (ICT) Link
- ✓ Delivery Point
- ✓ Currency of Supply (NR / INR / \$)
- ✓ Risk of Currency Fluctuation
- ✓ Round the Clock Power through ICT
- ✓ Deviation Management for Active & Reactive Power
- ✓ Risk of Transmission Charges / Losses
- ✓ Payment Security Mechanism
- ✓ Political Risk

Conceptual Diagram of Power Flow



Nepal – India - B desh – Bhutan Transmission Link





THANKS